

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A printing method for printing
a pixel ~~at a gray level having a gray level of~~ x on paper
5 ~~by with~~ a printer, the printer comprising a thermal print
head and a ribbon, wherein the thermal print head comprises
a heater for heating the ribbon to print pixels from gray
levels 1 to $m-1$ on the paper, wherein m is a positive integer
10 representing possible gray levels, x is the gray level of
the pixel being printed, and a value n represents a
predetermined number of heating duration divisions, x being
a positive integer between 1 and $m-1$, inclusively, and n
being a positive integer, the method comprising:
if x is not greater than a the value n , heating the ribbon
15 x times and evenly distributing the heating initiation
times of the x times between the time point 0 and the
time point $(m*(x-1)/n)$, for printing the pixel with a
gray level of at gray level x on the paper; and
if x is greater than the value n , heating the ribbon x times
20 and evenly distributing the heating initiation times of
the first n times between the time point 0 and the time
point $(m*(n-1)/n)$ and distributing the heating
initiation times of the remaining $x-n$ times after the
heating initiation time points of the first n times.

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Claim 2 (currently amended): The method of claim 1, wherein
if x is greater than a the value n , ~~heating the ribbon x~~
~~times and evenly distributing the heating initiation times~~
~~of the n times between the time point 0 and the time point~~
30 ~~$(m*(n-1)/n)$ and distributing the heating initiation times~~
of the remaining $x-n$ times are distributed after the heating
initiation time points of the first n times in order.

Claim 3 (currently amended): The method of claim 1, wherein
the more heating times of the ribbon is heated, the darker
the gray level of the pixel printed by the heater on the
5 paper is.

Claim 4 (currently amended): The method of claim 1, wherein
m is equal to ~~255~~ 256.

10 Claim 5 (original): The method of claim 1, wherein the
printer is a thermal printer.

Claim 6 (original): The method of claim 1, wherein the
printer is a photo printer.
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Claim 7 (new): The method of claim 4, wherein n is equal to
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